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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,720	10/18/2001	Moshe Rock	10638-025001	8722
26161	7590	07/15/2005	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			BEFUMO, JENNA LEIGH	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/982,720

Applicant(s)

ROCK ET AL.

Examiner

Jenna-Leigh Befumo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27, 30 and 37 is/are pending in the application.
- 4a) Of the above claim(s) 19-23, 26 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18, 24, 25, 30 and 37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. The Amendment submitted on April 26, 2005, has been entered. Claims 28, 29, 31 – 36, and 38 – 54 have been cancelled. Claims 1 and 14 have been amended. Therefore, the pending claims are 1 – 27, 30, and 37. Claims 19 – 23, 26, and 27 are withdrawn from further consideration as being drawn to a nonelected invention.
2. The amendment to claim 14 is sufficient to overcome the 35 USC 112 2<sup>nd</sup> paragraph rejection set forth in the previous Office Action.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1 – 9, 16 – 18, 25, 30, and 37 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lombardi et al. (4,103,518) in view of Ploch et al (3,837,943) for the reasons of record.

The permeability limitation which has been amended in the previous response, would still be met by the two references for the reasons of record, since the references teach are the claimed structural limitations.

5. Claims 10 – 13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lombardi et al. in view of Ploch et al. as applied to claim 1 above, and further in view of Richards et al. (5,557,950) for the reasons of record.

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6. Claim 24 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Lombardi et al. in view of Ploch et al. as applied to claim 1 above, and further in view of Callaway for the reasons of record.

7. Claims 14 and 15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lombardi et al. in view of Ploch et al. and Richards et al., as applied to claim 10 above, and in further view of Wood et al. (US 2002/0124365 A1) for the reasons of record.

***Response to Arguments***

8. Applicant's arguments filed April 26, 2005 have been fully considered but they are not persuasive. The applicant argues that one of ordinary skill in the art would not have been motivated to use a thermally sensitive yarn as a stitch yarn in knitted loop fabric disclosed by Lombardi et al. because the pile fabric disclosed by Ploch et al. is constructed in a very different manner than the pile fabric disclosed by Lombardi et al. (response, pages 8 – 9). Particularly, the applicant argues that Ploch et al. fails to teach using a ground fabric which is air permeable and has interstices or opening between the stitch yarns. However, this presumption based on the figure shown in US 3,168,883, is not correct. First, it is noted that Ploch et al. teaches the base material is a fabric which would be made from a fibrous material and inherently have spaces or openings between the fibers or groups of fibers. Further, the drawing in US 3,168,883 is a representation of the fabric produced and not an actual small scale model of the invention. Hence, the picture cannot be relied on for complete accuracy. Further, US 3,168,883 states that the ground cloth 1 is a fabric which is produced by knitting or weaving (column 1, lines 20 – 25 and 40 – 45). Hence, the ground fabric would not be impermeable and would have openings between the interwoven or interlooped yarns just like the applicant's base fabric. Finally, US

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3,168,883 also discloses that the invention is designed to produce pile products similar to velvet pile fabrics produced by knitting or weaving alone (column 1, lines 12 – 20). Hence, the stitch-bonded fabric produced by Ploch et al. can be used instead of velvet or velour products produced in a single step by knitting.

Thus, the final structure of the fabric disclosed by Ploch et al. would be a ground fabric, which can be a knitted or woven fabric, with pile yarns attached to the ground fabric by stitching yarns. Similarly, the fabric structure disclosed by Lombardi et al. is a knit fabric with a knit base layer and loops (or pile yarns) attached to the base fabric by a stitching thread. Therefore, not only does Ploch et al. disclose using a base fabric made by knitting and having openings in the base fabric, but Ploch et al. is very close in structure to the knitted pile fabric disclosed by Lombardi et al. Thus, replacing the stitching thread in Lombardi et al. with a thermally sensitive yarn would produce a more dimensionally stable fabric and increase the bulk of the fabric. Further, the applicant's basis for the argument that the ground fabric in Ploch et al. is impermeable is unfounded. Also the applicant's contention that Ploch does not teach to reduce permeability by using a thermally sensitive yarn is incorrect because Ploch teaches that heating the yarn increases the bulk of the fabric which would inherently decrease the permeability of the fabric. This relationship would be appreciated by one of ordinary skill in the art since permeability is indirectly related to the bulk and openness of the fabric.

Additionally, the applicant argues that one of ordinary skill in the art would not be motivated to add the thermally sensitive yarn to the knit fabric disclosed by Lombardi et al. because the loops in Lombardi et al. are interloped with the base fabric and not as likely to come free as the pile yarns disclosed by Ploch et al. (response, page 10). However, looped pile yarns

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can be pulled or snagged even though they are more strongly connected to the base fabric than the pile yarns disclosed by Ploch et al. which can cause sections of the fabric to unravel since the yarns are interloped together. Thus, adding a thermally sensitive yarn to bond the pile yarn to the base fabric would increase the bond between the base fabric and the loop yarn producing a final product which is less likely to have snags on the surface and has better dimensional stability and wear resistance. Thus, the rejection is maintained.

9. With regards to the rejections including Richards, Callaway, and Wood, the applicant argues that these references fail to overcome the deficiencies of the rejection based on Lombard I et al. and Ploch et al. (response, pages 10 – 11). However, as set forth above, Lombardi et al. and Ploch et al. address all the claimed limitations and do not have any deficiencies. Thus, the rejections are maintained.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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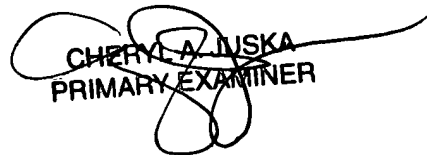
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jenna-Leigh Befumo  
July 7, 2005



CHERYL A. JASKA  
PRIMARY EXAMINER